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## 2023 Annual CCR

2023 water analysis results for WSSN 02823

### How can you get involved?

To learn more about the operation of your water system, please attend a regularly scheduled City Council meeting. Council meetings are held on the third Monday of each month at 7:00 p.m. in the City Office Building located at 280 S. Maple Street.

# City of Grant Water Quality Report

**Information about lead:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Grant Water Supply is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

**Information about arsenic:** While your drinking water meets the U.S. EPA standard for arsenic, it does contain low levels of arsenic. The U.S. EPA standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Monitoring and Reporting to the Department of Environmental Great Lakes & Energy (EGLE) Requirements:** The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2023.

*For your information*

## Introduction

This report covers the drinking water quality for the City of Grant for the 2023 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2023. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards. We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies of this report will not be mailed to individual households. However, copies of this report, Source Water Assessment and Well Head Protection Program are available at the Grant Municipal Offices, located at 280 S. Maple Street, during regular business hours.

If you would like to know more about this report, please contact City Hall at 231-834-7904. If you have any questions or concerns about the water quality, water system, or this report, please contact Mr. Nathan Yeomans at 616-213-2852 between the hours of 7:00 a.m. and 3:30 p.m.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. The EPA/CDC (Center for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791).

## Glossary of Terms Used in This Report

**AL** (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**HRAA** (Highest Running Annual Average)

**MCLG** (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MCL** (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MRDL** (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

**MRDLG** (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA** Not applicable

**ND** Non-detect; The level of this particular contaminant was below the detection limit of the analysis.

**pCi/l** (Picocuries per liter): A measure of radioactivity

**ppb** (Parts per billion): or micrograms per liter (ug/L); 1 ppb is equal to a single penny in \$10,000,000.

**ppm** (Parts per million): or milligrams per liter (mg/L); 1 ppm is equal to a single penny in \$10,000.



# Your Drinking Water

## What is the source of my water?

The City of Grant’s water comes from three municipal wells sunk to depths of 307 feet. The underground source of water is called the Pleistocene Glacial Drift Aquifer. As water is pumped from the aquifer, chlorine is added to ensure that the water is disinfected and to protect it from microbial contaminants. The wells consist of two 10-inch production wells capable of producing 400 gallons of water per minute (gpm) each, and a 6-inch backup well, which will supply 130 gpm. The wells are powered by electricity, with a 300-kilowatt diesel fueled generator for electrical backup. They are in Grant Township on City owned property, with the surrounding land and its access restricted to avoid activity that could lead to contamination of the water supply. The City of Grant’s wellhead protection program is in place to help reduce this risk. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is low

## Types of Water Contaminants

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before we treat it include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife

**Inorganic contaminants**, such as salts and metals, which can be naturally occurring, or result from urban storm water runoff, industrial or domestic wastewater discharges, oil/gas production, mining, or farming;

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses;

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;

**Radioactive contaminants**, which can be naturally occurring.

## Why are there contaminants in drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline (1-800-426- 4791)

Estimated Number of Service Connections by Service Line Material						
A service line includes any section of pipe from the water main to the building plumbing at the first shut-off valve inside the building, or 18 inches inside the building, whichever is shorter.						
Any Portion Contains Lead	Contains Galvanized Previously Connected to Lead*	Unknown			Contains neither Lead, nor Galvanized Previously Connected to Lead	Total**
		Likely Contains Lead	Likely Does Not Contain Lead	Material(s) Unknown		
0	0	0	19	0	311	330
*If a galvanized line is still connected to lead, it is a lead service line and must be counted in the first column.						
**The total number should equal the total number of potable water service lines in your water supply (residential, commercial, industrial, other).						

Water Quality Data Tables								
Note: The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.								
Inorganic Contaminants	Unit	MCL	MCLG	Level Detected	Range Detected	Sample Date(s)	Violation	Typical source of contaminant
Fluoride	ppm	4.0	4.0	0..207	N/A	2023	No	Added to protect teeth
Barium	ppm	2	2	.059	N/A	2022	No	Erosion of natural deposits
Chromium	ppm	0.1	0.1	0.0012	N/A	2022	No	Discharge from steel and pulp mills; Erosion of natural deposits
Sodium	ppm	NA	NA	9.04	N/A	2023	No	Erosion of natural deposits
Arsenic	ppb	10	0	5.54	ND-6.48	2023	No	Erosion of natural deposits
Disinfection Byproducts	Unit	MCL	MCLG	Highest Detected	Range Detected	Sample Date	Violation	Typical source of contaminant
Total Trihalomethanes	ppb	80	NA	21.3	N/A	2023	No	Byproduct of chlorination
Total Haloacetic Acids (HAA5)	ppb	60	NA	10.1	N/A	2023	No	Byproduct of chlorination
Disinfectant Residual	Unit	MRDL	MRDLG	RAA	Range Detected	Sample Date(s)	Violation	Typical source of
Chlorine Residual	ppm	4.0	4.0	0.06	0.03-0.14	2023	No	Added to disinfect water
Lead & Copper	MCL	Action Level	90% samples < this level	Range Detected	# Samples Exceeding AL	Sample Date	Exceeds AL	Typical source of contaminant
Lead(ppb)	15	15	2	0-7	0	2022	No	Corrosion of home plumbing
Copper(ppm)	1.3	1.3	0.2	0-0.3	0	2022	No	Corrosion of home plumbing
Microbiological Contaminants	Units	TT		Positive Samples	#of Samples in 2023	Sample Dates	Violation	Typical Source of Contaminant
Total Coliform	Absent/ Positive	>1/ mo.	N/A	0	12	1/1/22 - 12/31/22	No	Naturally Present in environment